

For the Amusement of a Quite Discerning Audience

One-liners with a decidedly mathematical flavor, collected and annotated by
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We all like to laugh. Not everyone laughs about the same things, though. (In fact, you might not find anything here at all amusing, in which case, please allow me to apologize in advance for wasting your time.) Most of us have at some point found mirth in situations that our compatriots could not see in quite the same light. This is especially true for those of us with a mathematical bent. Humor in mathematics is a prize rarely shared with those outside the community.

Perhaps this collection can help spread the joy a little bit. Probably not. I'm going to give it a try, though.

The thing is this: Getting a mathematical joke requires some knowledge of the mathematical background being referenced, right? And it's no fun if you don't understand why a joke is supposed to be a joke. Don't you just hate it when a joke has to be explained to you? When the punch line contains a reference so obscure, you need a translator and an encyclopaedia to get it? Well, that is precisely what this collection intends to offer. In order to help people outside of the Math World understand the jokes, there will also be a full explanation. First of all, for your delectation: a collection of jokes with mathematical punch lines that non-math people will likely just not get. But to help those fine people comprehend the hilarity (such as it is), they can turn to Part II, where they will find an explanation as to why each of these nuggets is "supposed to be funny".

A few acknowledgements:

You are welcome to pepper your conversation with any and all of these gems, although I am not sure that I am really allowed to give this kind of permission. As is normal in any collection of mathematical content (problems, theorems, axioms, whatever), some of these pieces have been "collected" from origins lost to history. In two cases, I recall being told the kernel of the joke, and thanks are due to Andy Liu and Jozef Kalinowsky for these. One joke was actually told by a professional stand-up comedian on tv, but since I do not recall his name, I unfortunately cannot thank him here. One other, I know to be fairly well known. The others are probably my idea, but who knows what influences have come together in me to produce this stuff? If you recognize some of your own original material here, please be assured of my eternal thanks. And remember that I don't get paid for this.

Part I: Here we go.

1. When I was a little kid, I thought I had an imaginary friend. It wasn't until much later that I found out that i was imaginary.
2. Have you heard about the Einstein-Pythagoras Theorem?
$$E = m \cdot (a^2 + b^2).$$
3. The editor of the Totally Hot Math Journal bought a bedroom set and ended up suing the manufacturer. It turned out the mattress-makers didn't use latex.

4. I wanted to take the bus to the university the other day and couldn't recall whether I had to take the 34 line and switch to the 43 or the other way around. So I asked a guy at the bus stop, but all he could tell me was that he doesn't commute.
5. The IMU sponsored a study to find out why Hungarian mathematicians are so exceptionally good at solving complex problems. It turns out it's because so many of them are named Imre.
6. A few weeks ago, I went to a meeting and stayed at the Math Hotel.
 - a. The first day, I was given Room e . I wanted to watch some tv, but all I could get was hockey; an Edmonton game.
 - b. The next day, they switched me to Room π . This was really easy to remember, but it took forever to dial on the in-house phone.
 - c. There was a wedding reception going on in the ballroom, which they called *The E^4* . This gives everyone an excuse for having two left feet when they have to polka.
7. And finally, the shortest mathematical joke? Let $\epsilon < 0$.

Puzzled? Check this out.

Part II: The explanatory text.

If you are still reading at this point, you are either a very thorough person or searching for some guidance through the obscurities of the one-liners from Part I. If the latter is the case, please be warned that explanation of the punch line will inevitably kill any joke. So if you didn't find a joke funny on first read, you probably still won't even after you read the explanation. But at least you will be able to comfortably tell the joke to somebody else and then explain it to them.

1. With this one, we are starting off easy. The lower case i is generally used to denote the imaginary unit; a number defined as having the property $i^2 = -1$. The i in the text seems at first glance to be a personal pronoun, referring to the

narrator, but in fact, it is simply a non-sequitur stating that the narrator did not learn about the imaginary unit until later in life.

2. This is a combination of Einstein's well known statement $E = mc^2$ and the Pythagorean Theorem $c^2 = a^2 + b^2$. The statement in the joke results from substitution, which makes no sense at all, since the letter c does not denote the same thing in the two expressions. In Einstein's equation, c is the speed of light, whereas in the Pythagorean Theorem, c is the length of the hypotenuse of a right-angled triangle. Juxtaposition of the disparate meanings yields semantic tension and hilarity ensues.
3. We are getting a little bit obscurer here. Mathematical journals and books are almost always typeset in a program called LaTeX. Journal editors consistently prefer submissions to "use LaTeX", since this saves work in preparing the journal for publication. On the other hand, some types of medium to high quality mattresses are made of a chemical called latex.
4. The guy at the bus stop seems to be stating that he does not commute, i.e. he does not take the bus to work regularly. In the question, the narrator is talking about the order of two things, in this case taking the two busses. Obviously, the order cannot be reversed if one wishes to get to a specific place; under normal circumstances, it is only possible to get one bus at the stop in question in the first place. If such an exchange of the order were possible, taking these busses would be commutative, like addition ($34 + 43 = 43 + 34$). But this, too, does not commute. As in the previous joke, we are using the dual meaning of a word to create a humorous situation.
5. The "complex problems" referred to seem to be simply hard problems (although it is unclear how a problem can be simply hard). However, this can be a reference to complex numbers that are composed of a real part and an imaginary part. The imaginary part of a complex number z is typically denoted by $\text{Im } z$ and the real part by $\text{Re } z$. Combining these two symbols, we get ImRe . Imre is, indeed, a common men's name in Hungary.
6.
 - a. Although e is a possible letter for a room "number", in mathematical contexts it is generally used as meaning Euler's constant. The professional hockey team from Edmonton is known as the Oilers. The joke lies in the fact that the two words (Euler and Oiler) are practically homophones, with only the "l" and "r" sounds being slightly different.
 - b. π is not really a possible room number, but it is the Math Hotel, right? The concept of taking forever to dial refers to the fact that π has a non-structured decimal representation. In fact, only positive integers are used for hotel room numbers, and any reference to decimals in a telephone context is quite humorous a priori.
 - c. In four-dimensional Euclidean space (generally referred to as E^4), three-dimensional shapes can be freely rotated into their own mirror images. There is, therefore, no such a concept as a "left" foot in this space. On the other hand, having "two left feet" is a common phrase referring to a person's inability to dance very well.
7. Quite a howler, this. In elementary calculus proofs, the first line is inevitably "Let $\epsilon > 0$." A negative value for ϵ is simply absurd in this context. Nuff said.

And there we are. A full explanation. Aren't you sorry you asked?

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